

# From pilot to scale in the area of digital technology for Active and Healthy Ageing (AHA)

The case of PHArA-ON project and Going from Idea to Market with Arnora Oy



13.05.2022



11:00 AM CET - 12:45 PM CET



**ARNORA**



[www.pharaon.eu](http://www.pharaon.eu) | [www.arnora.com](http://www.arnora.com) | [www.shine2.eu](http://www.shine2.eu) | [www.platformuptake.eu](http://www.platformuptake.eu)



National Research Council of Italy



**Fraunhofer**  
IGD



POLITECNICA



Institut  
"Jožef Stefan"  
Ljubljana, Slovenija



Universitat  
de les Illes Balears



SMARTHOMES



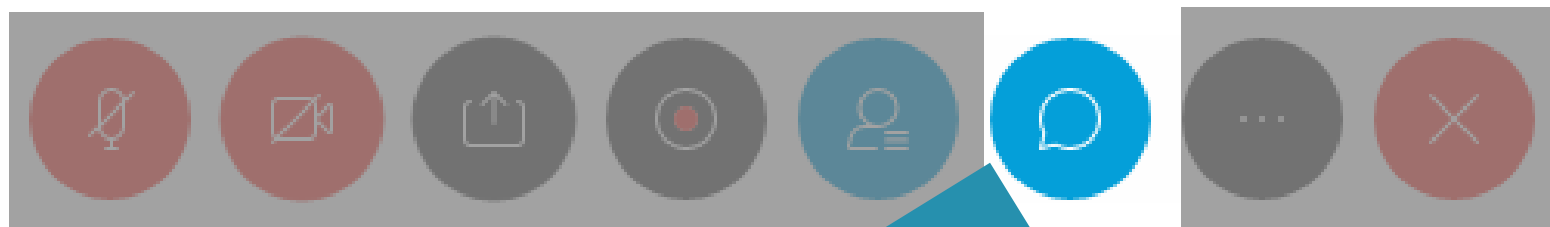
This project has received funding from the European Union's Horizon 2020 Research and Innovation Action under Grant Agreement No 875452.

# Agenda

Times are only indicative

Time	Topic	Presenter
11:00 - 11:05	Welcome and introduction to the webinar	<b>Alexander Nikolov</b> SYNYO GmbH, Austria
11:05 - 11:20	Open Platforms in the area of active and healthy ageing – needs, requirements, and good practices in using open platforms services	<b>Carina Dantas</b> SHINE2 EUROPE, LDA, Portugal
11:20 - 11:30	PlatformUptake.eu - current results and achievements	<b>Natália Paes Leme Machado</b> PlatformUptake.eu project
11:30 - 11:45	PHArA-ON – a case of Open Platform in AHA domain, main challenges, and end-users organizations requirements	<b>Mariana Camacho</b> Santa Casa da Misericórdia da Amadora, Portugal
11:45 - 12:00	Facilitating Innovation - Facilitating testing	<b>Jukka Niiranen</b> CEO, Arnora Oy, Finland
12:00 - 12:10	Regulations Vs piloting	<b>Abhishek Jayaprakash</b> CEO, Hoivita, Finland
12:10 - 12:25	Challenges of sub contracting and building multinational distribution channels	<b>Antti Pellinen</b> CFO, Confienta Oy, Finland
12:25 - 12:35	Q & A	
12:35 - 12:45	Final remarks	<b>Alexander Nikolov</b> SYNYO GmbH, Austria

***All participants are kindly invited to raise questions in the chat.***

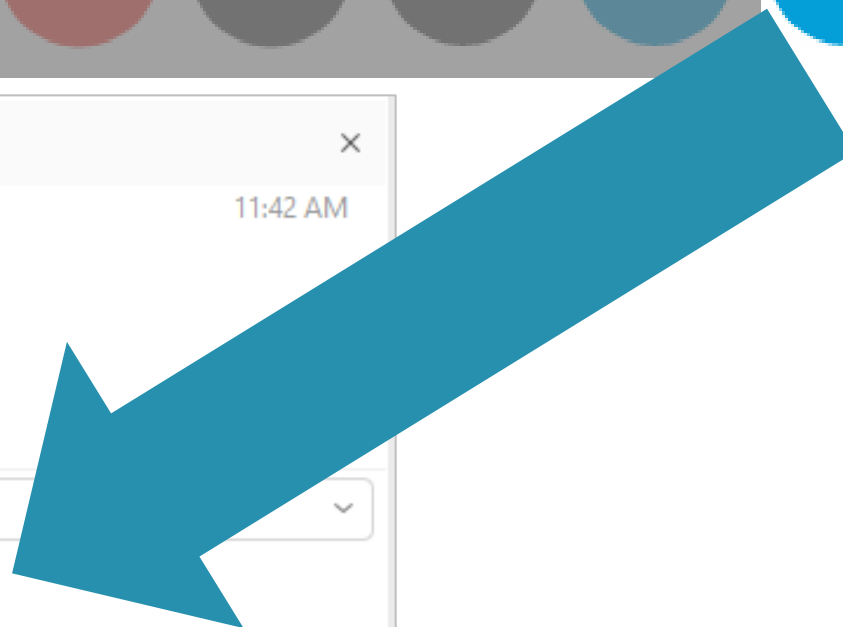


Chat

from Collabto Calls to everyone: 11:42 AM

Please include your questions here!

To: Everyone



A blurred background image showing a person's hands and arms as they plant a small tree in a garden bed. The person is wearing a dark, patterned top. The garden bed has brown mulch and some green plants. The background is slightly out of focus, showing a white wall and some foliage.

# Taking the world a step forward



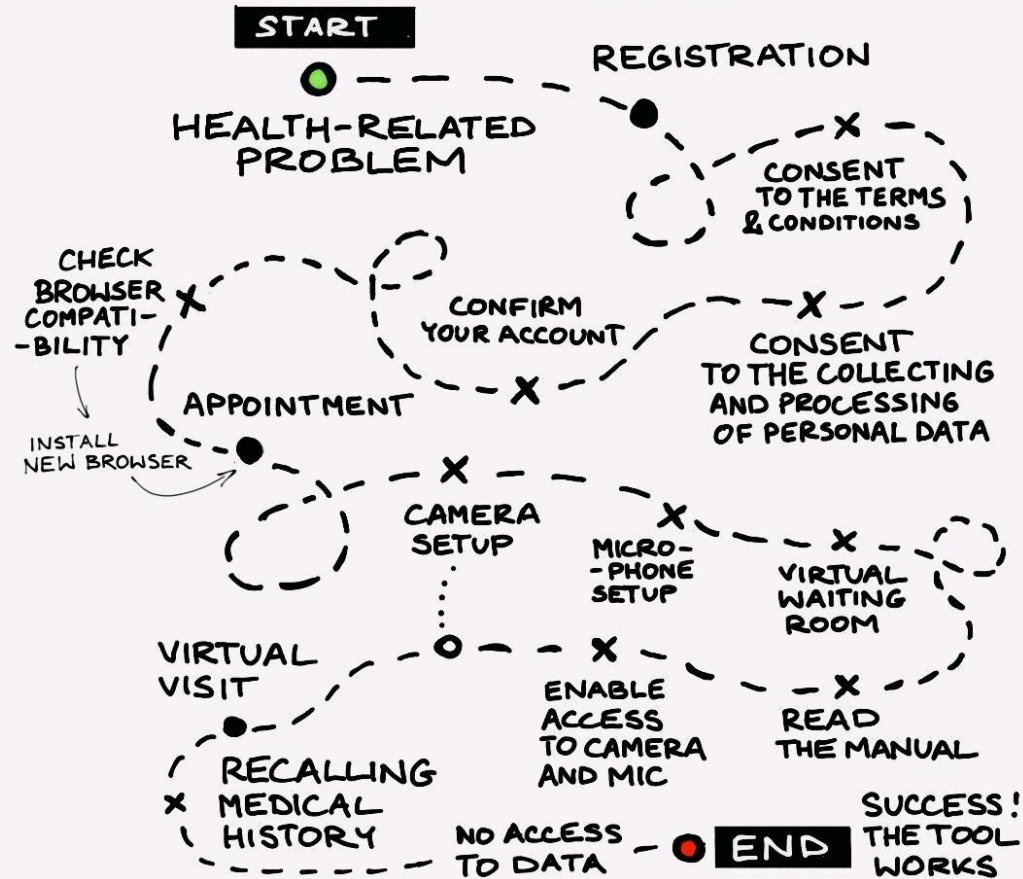
**Carina Dantas**

**Open platforms in AHA – needs, requirements and good practices** | 13 May2022  
Webinar PlatformUptake

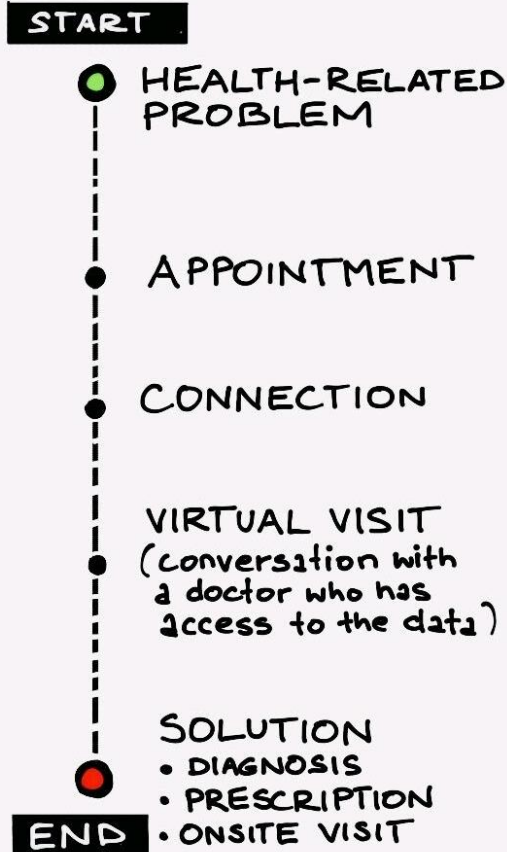


# PATIENT JOURNEY AS SEEN BY

## THE PROVIDER



## THE PATIENT



SEE THE  
DIFFERENCE?

## How to find, select and use an open platform?

Massive Open Online Course (MOOC) for  
healthcare organisations and public  
authorities

[Click Here](#)



Internet has become increasingly important – and even more in 2020, following the COVID-19 outbreak and the related confinement and social distancing measures.

In 2020, 88% of people aged 16-74 in the EU reported they had used the internet in the last 3 months; ranging from 70% in Bulgaria to 99% in Denmark.

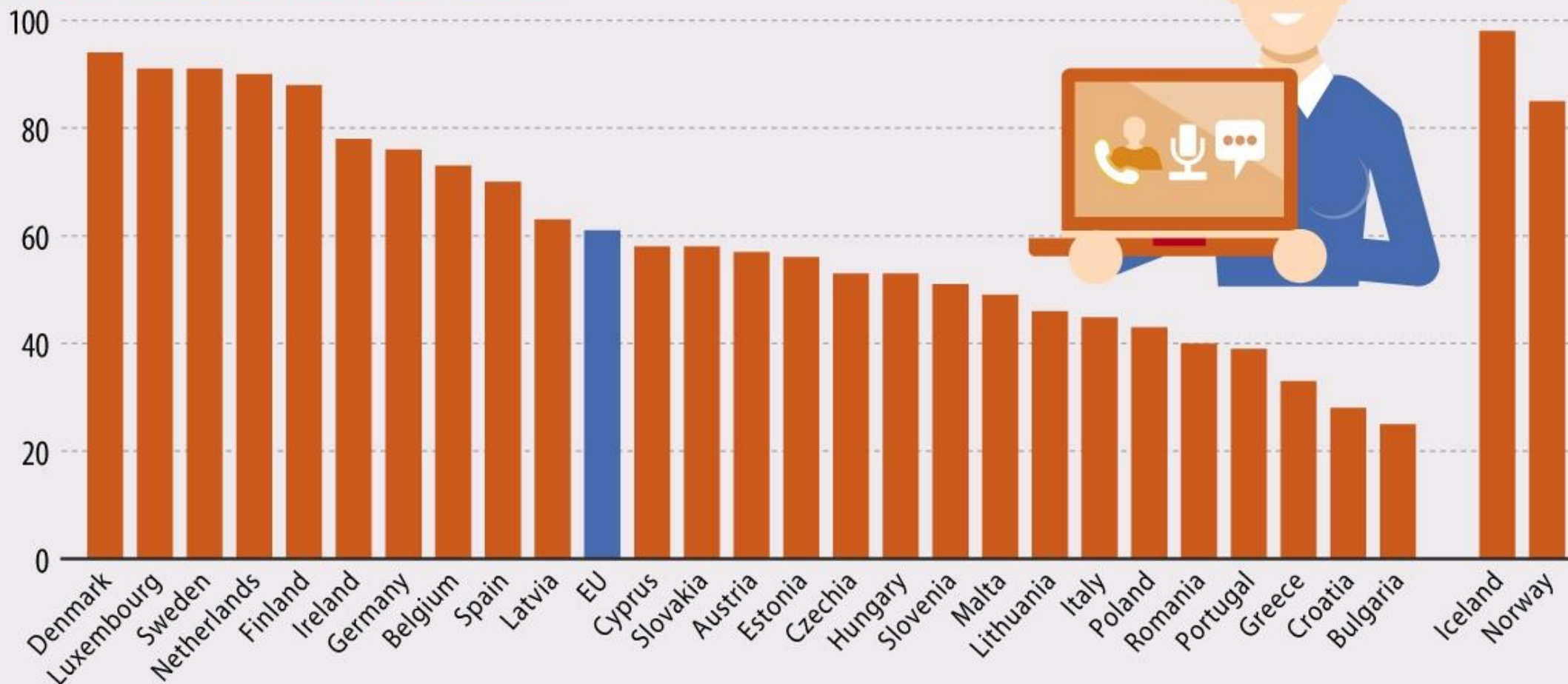
Although very common among the young, internet use is not as habitual among the older generation:

- 98% of those aged 16-24 used the internet in the last 3 months
- vs. 61% of those aged 65-74.

While internet use remains high among the young across the EU, it varies greatly among the older age groups.

# ARE DIGITAL TOOLS BEING USED BY OLDER ADULTS?

## Share of people aged 65 - 74 who used the internet in the last 3 months, 2020



France: 2020 data not available. As a result, the EU aggregate has been estimated.



# WHAT FACTORS INFLUENCE IT?

**Frequency of Internet use according to employment status, job type, income levels and place of living, EU-27, 2020**  
(% of the respective group, use of the Internet once a week (including every day))



Source: Eurostat, ISOC\_CI\_IFP\_FU (2021)

Note: data refers to individuals aged 25-64

# In the aftermath of the pandemic, what do we need for digital uptake?

## **CITIZENS** need to improve:

- digital skills
- health literacy
- engagement and democratic participation
- less inequalities on access

## **ENVIRONMENTS** have as major challenges:

- house retrofitting
- digital infrastructures
- public spaces & mobility
- climate neutral solutions

## and, finally, **HEALTH AND CARE** need:

- reliable accessible big data
- integrated and person-centered pathways
- long-term funding solutions/business models

**We acknowledge that all these challenges are interconnected  
and that a global approach is needed!**

## WHAT ACTIONS TO IMPLEMENT?

- Raise awareness on the need to coordinate health and social care, building infrastructure and environment conditions in order to move ageing and wellbeing towards home care and prevention – to a **health and wellbeing value-based approach**;
- **Modernise education** of urban planners, architects and ICT developers to focus on on lifelong learning, evidence-based design, smart healthy environments and empowerment;
- **Support public authorities and health and social care providers on implementing SHAFE**, especially regarding building or restructuring the built environment to include ICT solutions with integrated health and care provision;
- Promote **training of formal and informal caregivers** (communities) on SHAFE, creating a toolkit and implementing training actions in multiple countries;
- Jointly develop **sustainable business cases** with governments, insurance companies and investors to foster future investments on smart healthy environments.

This COST Action main goal is to foster **awareness and support the creation and implementation of smart, healthy indoor and outdoor environments** for present and future generations.

Public authorities,  
standards  
organisations

Academics and  
scientists

Citizens

Businesses, caregivers,  
and non-governmental  
organisations



**MANAGEMENT COMMITTEE | 51 Countries**  
**FULL NETWORK | ~330 participants**



**Chair**  
**Carina Dantas**



**Vice-Chair**  
**Willeke van Staalduinen**



To promote healthy and active ageing throughout the lifespan, **an integrated and holistic approach** on the physical and mental development of children and adults is crucial.

We recommend the **CREATION AND MAINTENANCE OF LOCAL, REGIONAL OR NATIONAL ECOSYSTEMS** in which all citizens, researchers, business, NGOs, health and social care professionals and authorities are enabled to cooperate with each other in a safe, learning and inclusive environment.

Training opportunities, joint learning of skills regarding healthy lifestyles for all ages, ICT usage, safe housing and independent living, maintained and safe outdoor spaces are all **KEY AREAS FOR ACTION**, along with financial security, online connectivity, accessibility and inclusiveness for all.

Social media, games, internet, connects everyone everywhere. **Technology is growing at a fast pace and technology is often not looked at through the lens of the older person or person with less capabilities.** Another trend are governmental and societal measures to create more efficiency in products and services provisions and to cut spending and to turn completely digital.

Looking at the future, a lifelong approach with **DIFFERENT AND TARGETED LITERACY MEASURES**, fit to different age ranges is needed. Grassroot organisations are the most adequate to provide them.

Traditional media could also be used, e.g. quizzes on television, or influencers (older adults) on national television to promote literacy and learning, because active citizenship is no longer possible without ICT tools.

We propose to stress the continuous **ADAPTABILITY AND PERSONALIZATION OF ENVIRONMENTS and ICT SERVICES** to the evolving needs of all people as they age.

**COMMUNITY PARTICIPATION** needs to be enabled as a valuable tool for continuous feedbacks and broader engagement in the use of ICT tools.

Beyond the issue of digital literacy we also need to look at the cost of digital connectivity. For older people on pensions which are below the average wage, the cost of broadband is often one bill too many.

A human-centred design approach is needed in policy making, bearing in mind that there are still many older adults lacking skills in using technology.

**Also, are we preparing younger people be tech-savvy for the technologies that will be available for active and healthy living in 20 years?**

# IT'S ALL ABOUT PEOPLE!





**"Success is not final; failure is not fatal: It is the  
courage to continue that counts."**



<https://shine2.eu/>



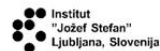
Carina Dantas  
[carinadantas@shine2.eu](mailto:carinadantas@shine2.eu)  
+351 936498277



# PlatformUptake.eu

Assessing the State of the Art and supporting an evidence-based Uptake and Evolution of Open Service Platforms in the Active and Healthy Ageing Domain

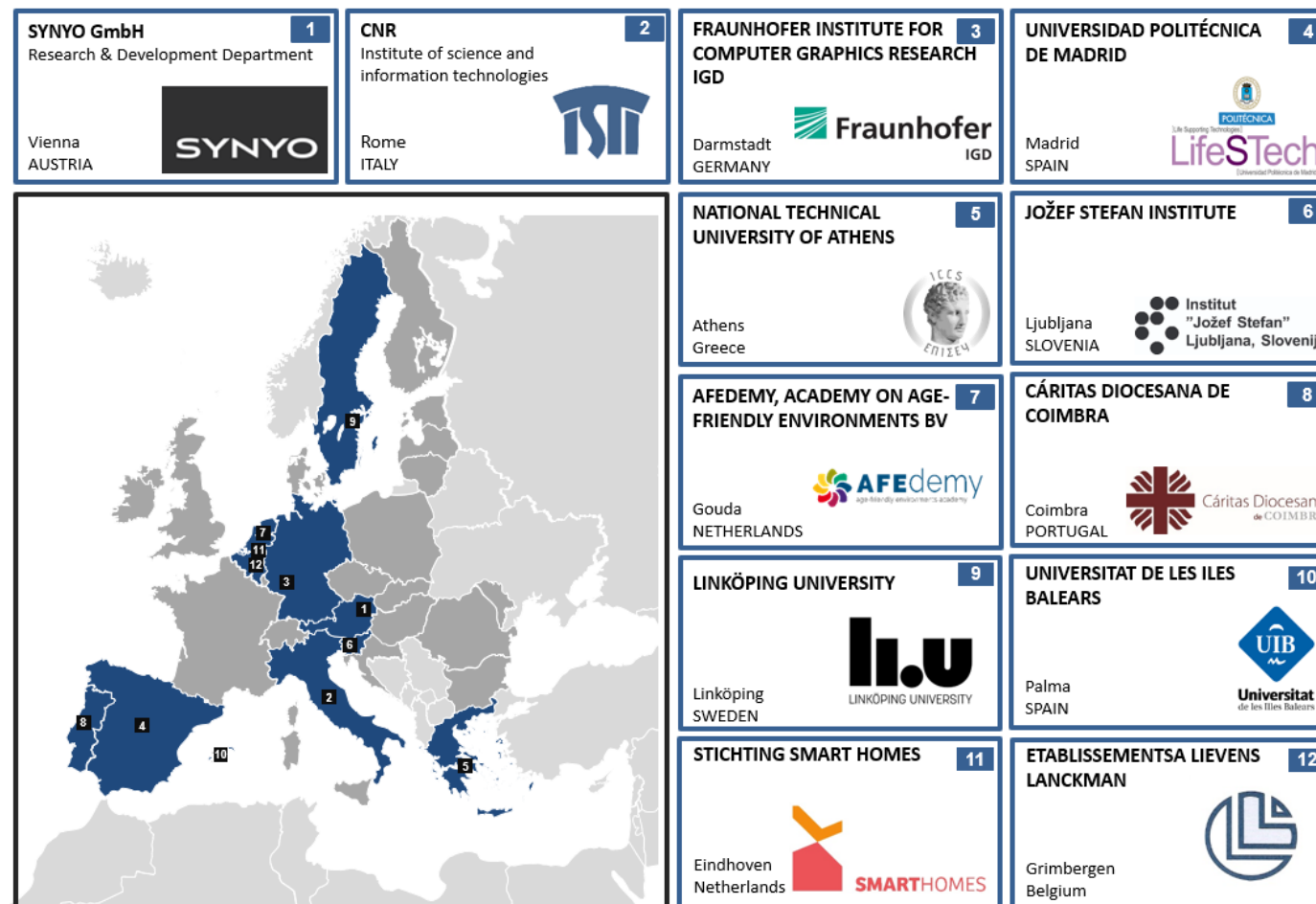
Natália Paes Leme Machado



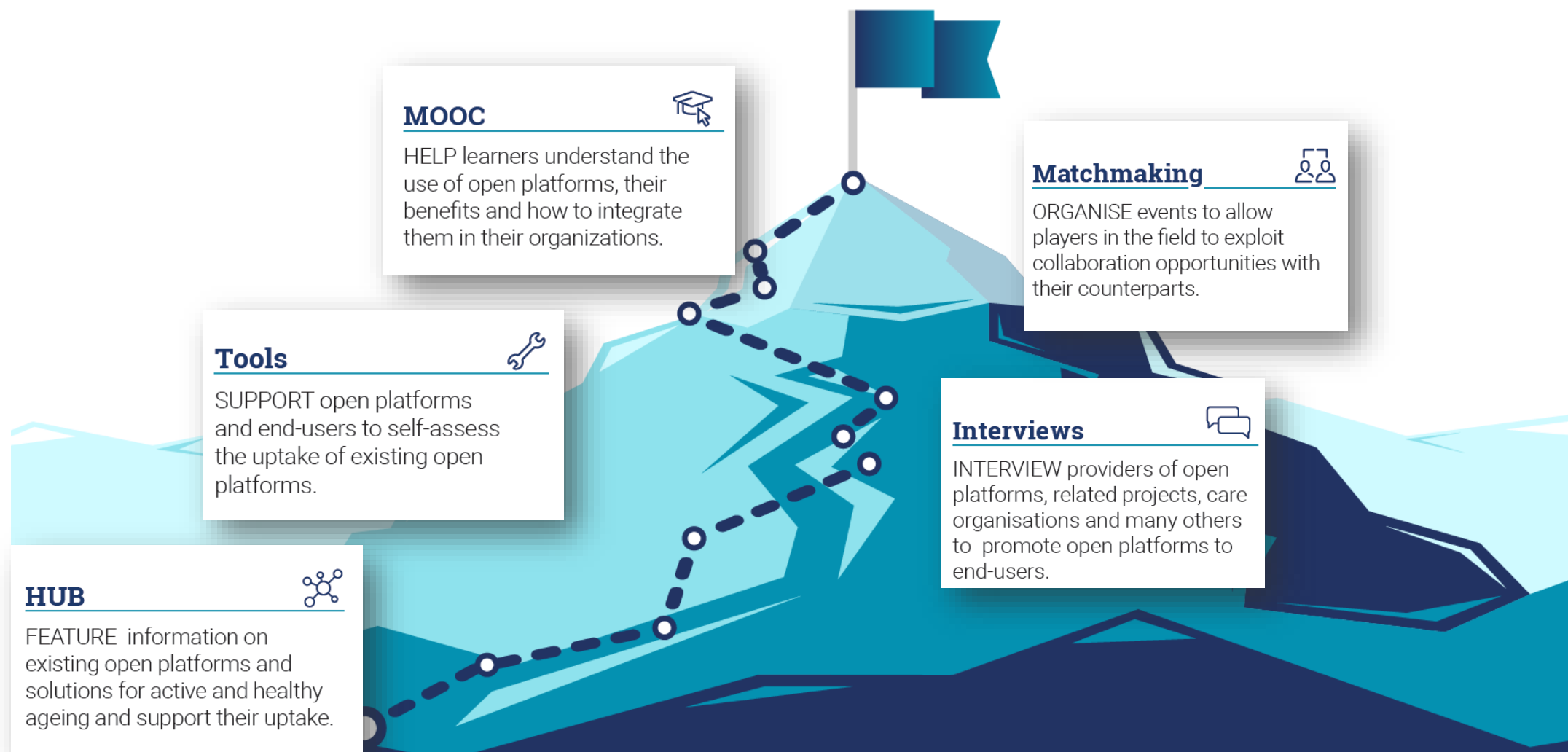
This project has received funding from the European Union's Horizon 2020 Research and Innovation Action under Grant Agreement No 875452.

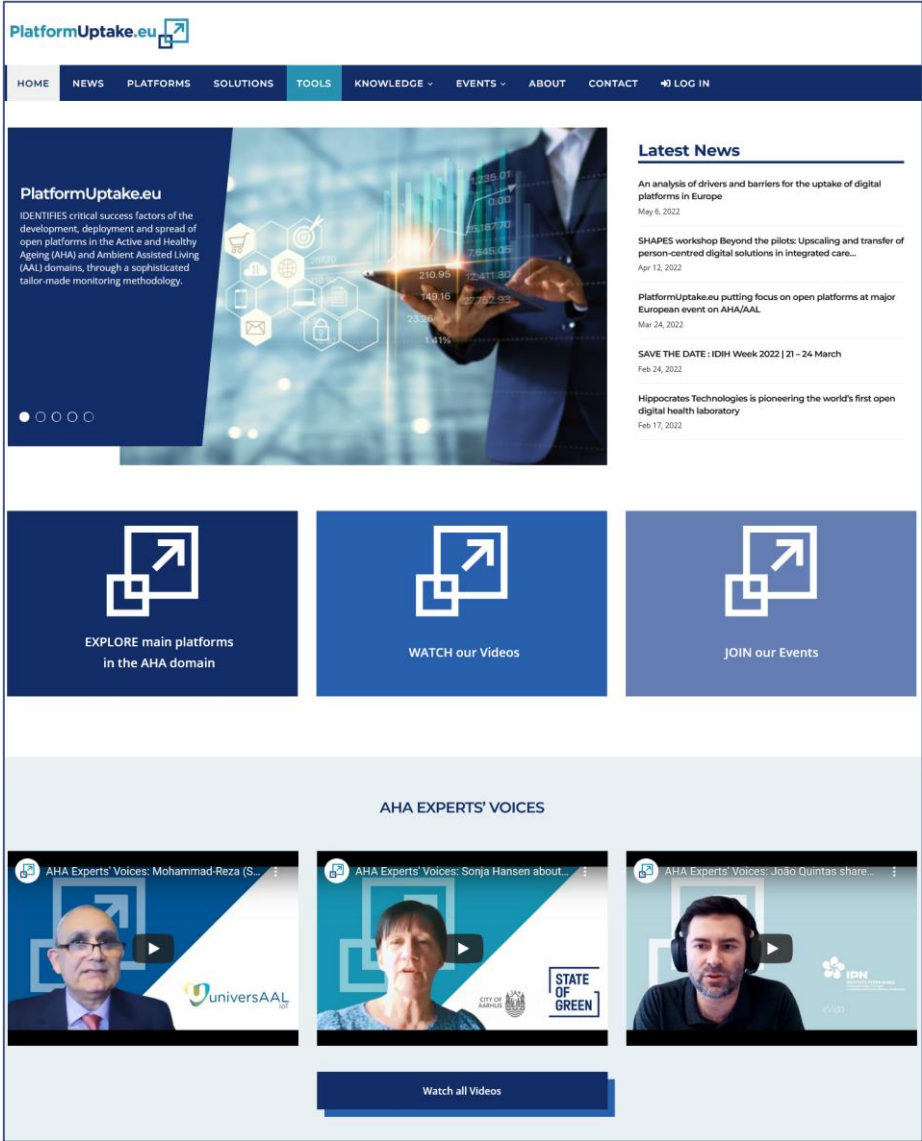


- PlatformUptake.eu: **Assessing the State of the Art** and supporting an evidence-based Uptake and Evolution of Open Service Platforms in the Active and Healthy Ageing Domain
- Project Type: **Coordination and Support Action**
- Project duration: **29 months**  
**(01/01/2020 – 31/05/2022)**
- Partners: **12 from 10 countries**









Platforms directory

Solutions directory

Matchmaking events

Best practices

Video interviews, webinars  
and workshops

Monitoring and evaluation  
tools

MOOC

smart Online Advisor

Gaps and innovation Needs

Pilots and implementations  
map

COMING SOON



SCAN ME!

Matchmaking events - vast network, knowhow and expertise in the field, upscale potential, innovation uptake and investment opportunities



## PlatformUptake.eu Consortium

12 consortium organisations and connected networks  
(Universities, SMEs, End user organisations)



## Locations

10 countries in Europe



## 45+ Projects and initiatives

AHA, ALA, Health care, IoT etc.



## Networks

IEEE, CEN, IN4AHA, IDIH, 50plus Hellas, SHAFE, Nerosubianco, EEN, NET4Age, ECHalliance etc.

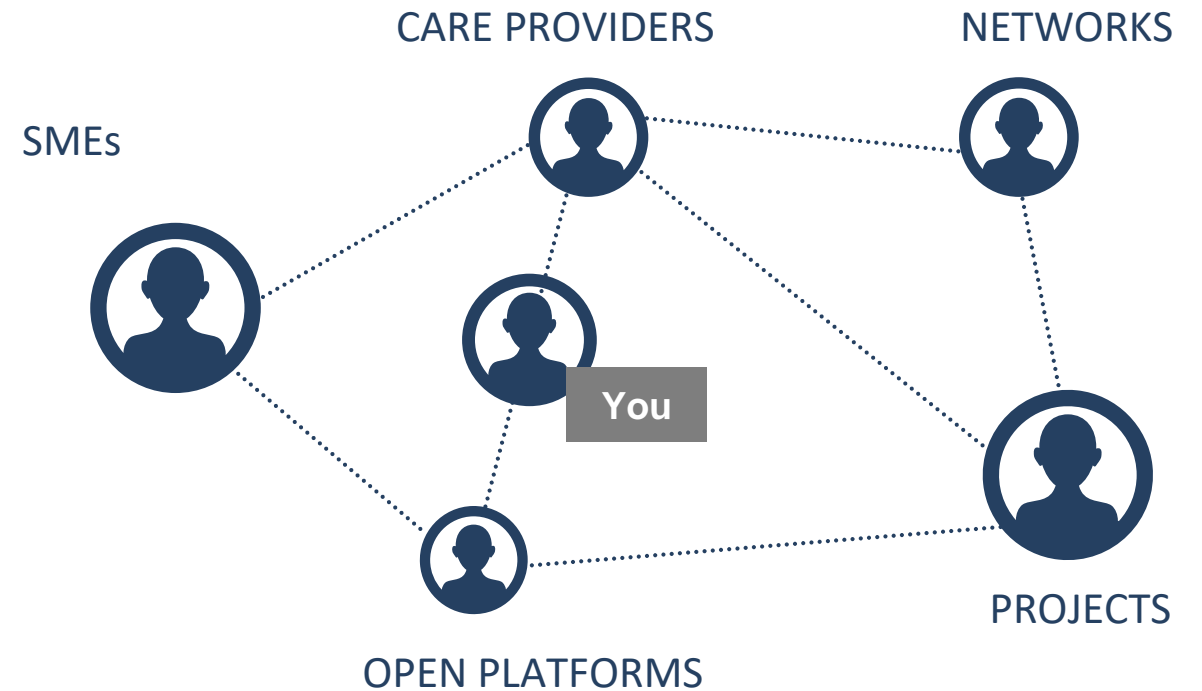


## 15+

Project events (Matchmaking, MOOCs, Open Information Hub Tools, Capability gaps and Innovation needs and more )



SCAN ME!

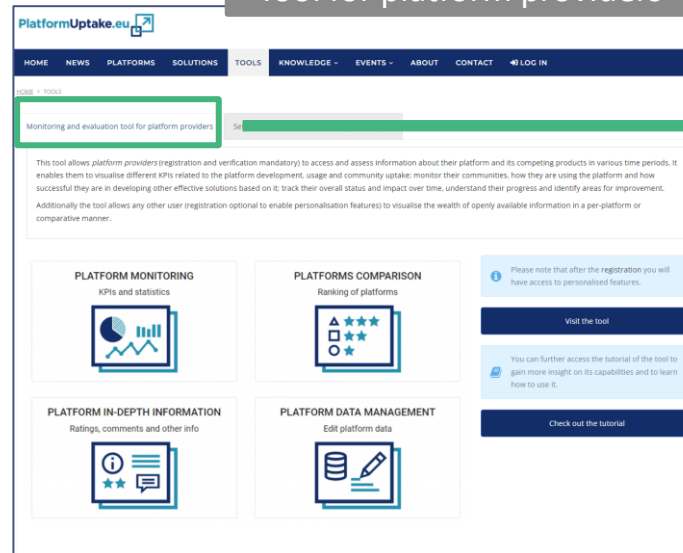


# Monitoring and self-evaluation Tools



The homepage features a navigation bar with links: HOME, NEWS, PLATFORMS, SOLUTIONS, **TOOLS**, KNOWLEDGE, EVENTS, ABOUT, CONTACT, and LOG IN. The 'TOOLS' link is highlighted with a green box. Below the navigation bar, there is a large banner for PlatformUptake.eu with the text: 'IDENTIFIES critical success factors of the development, deployment and spread of open platforms in the Active and Healthy Ageing (AHA) and Ambient Assisted Living (AAL) domains, through a sophisticated tailor-made monitoring methodology.' To the right of the banner is a 'Latest News' section with three articles. Below the banner are three blue buttons: 'EXPLORE main platforms in the AHA domain', 'WATCH our Videos', and 'JOIN our Events'. At the bottom, there is a section titled 'AHA EXPERTS' VOICES' featuring three video thumbnails of experts and a 'Watch all Videos' button.

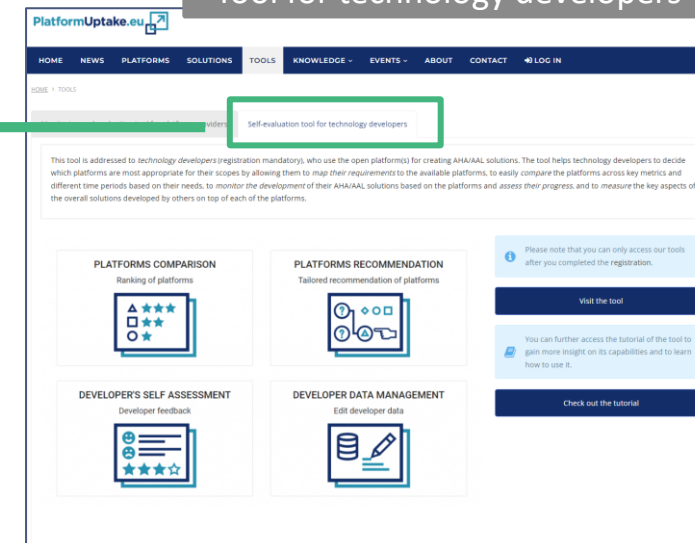
## Tool for platform providers



The page for the 'Tool for platform providers' has a navigation bar similar to the homepage. The 'TOOLS' link is highlighted with a green box. Below the navigation bar, there is a section titled 'Monitoring and evaluation tool for platform providers' with a description: 'This tool allows platform providers (registration and verification mandatory) to access and assess information about their platform and its competing products in various time periods. It enables them to visualise different KPIs related to the platform development, usage and community uptake; monitor their communities, how they are using the platform and how successful they are in developing other effective solutions based on it; track their overall status and impact over time, understand their progress and identify areas for improvement. Additionally the tool allows any other user (registration optional to enable personalisation features) to visualise the wealth of openly available information in a per-platform or comparative manner.' Below the description are four tiles: 'PLATFORM MONITORING' (KPIs and statistics), 'PLATFORMS COMPARISON' (Ranking of platforms), 'PLATFORM IN-DEPTH INFORMATION' (Ratings, comments and other info), and 'PLATFORM DATA MANAGEMENT' (Edit platform data). To the right of these tiles are two buttons: 'Visit the tool' and 'Check out the tutorial'.

Supports open platform providers and their users (technology developers and care organisations) in the AHA and AAL domains to self-assess the success and uptake of the platforms and their progress while developing solutions on top of them.

## Tool for technology developers



The page for the 'Tool for technology developers' has a navigation bar similar to the homepage. The 'TOOLS' link is highlighted with a green box. Below the navigation bar, there is a section titled 'Self-evaluation tool for technology developers' with a description: 'This tool is addressed to technology developers (registration mandatory), who use the open platforms for creating AHA/AAL solutions. The tool helps technology developers to decide which platforms are most appropriate for their scopes by allowing them to map their requirements to the available platforms, to easily compare the platforms across key metrics and different time periods based on their needs, to monitor the development of their AHA/AAL solutions based on the platforms and assess their progress, and to measure the key aspects of the overall solutions developed by others on top of each of the platforms.' Below the description are four tiles: 'PLATFORMS COMPARISON' (Ranking of platforms), 'PLATFORMS RECOMMENDATION' (Tailored recommendation of platforms), 'DEVELOPER'S SELF ASSESSMENT' (Developer feedback), and 'DEVELOPER DATA MANAGEMENT' (Edit developer data). To the right of these tiles are two buttons: 'Visit the tool' and 'Check out the tutorial'.

Users, such as SMEs or start-ups developing technology for active and healthy ageing are able to browse through the profiles of registered open platforms, compare them and get tailored platform recommendations based on their particular requirements and needs.



**WHAT ARE OPEN PLATFORMS?**

Principles to follow:

- Open Source
- Open Standards Based
- Interoperable

**Learning outcomes MOOC**

With this MOOC, learners will:

- To identify and successfully understand open platforms
- To include technology and open platform processes of your organisation
- To select an open platform

**INTRODUCTION - AIM**

- The aim of this MOOC on open platforms is to equip learners with the knowledge to find, select and use open platforms for their own/organisational benefits.
- The MOOC aims to raise awareness in the adoption of open platforms for healthcare, social care, welfare organisations, public authorities and insurance companies. This MOOC is publicly accessible and will remain publicly available on the Open Information Hub of PlatformUptake.eu.
- Learners will receive a certificate.

**OPEN PLATFORMS IN YOUR ORGANISATION**

In this chapter you will learn:

- The role of technology and open platforms in active and healthy ageing / active assisted living domain
- The potential usage and benefits of technology and open platforms

**TECHNOLOGY AND OPEN PLATFORMS**

Expected outcomes of technology for the care process, the management of available technologies

Mainly based on: Reijnders R, Pool A van der, Geerdink L, Van N, Boon B. Technologie in de gehandicaptenzorg. Stapspraken: Hoe kies je een passende technologie? Arnhem/Utrecht: Academisch Ziekenhuis, 2020.

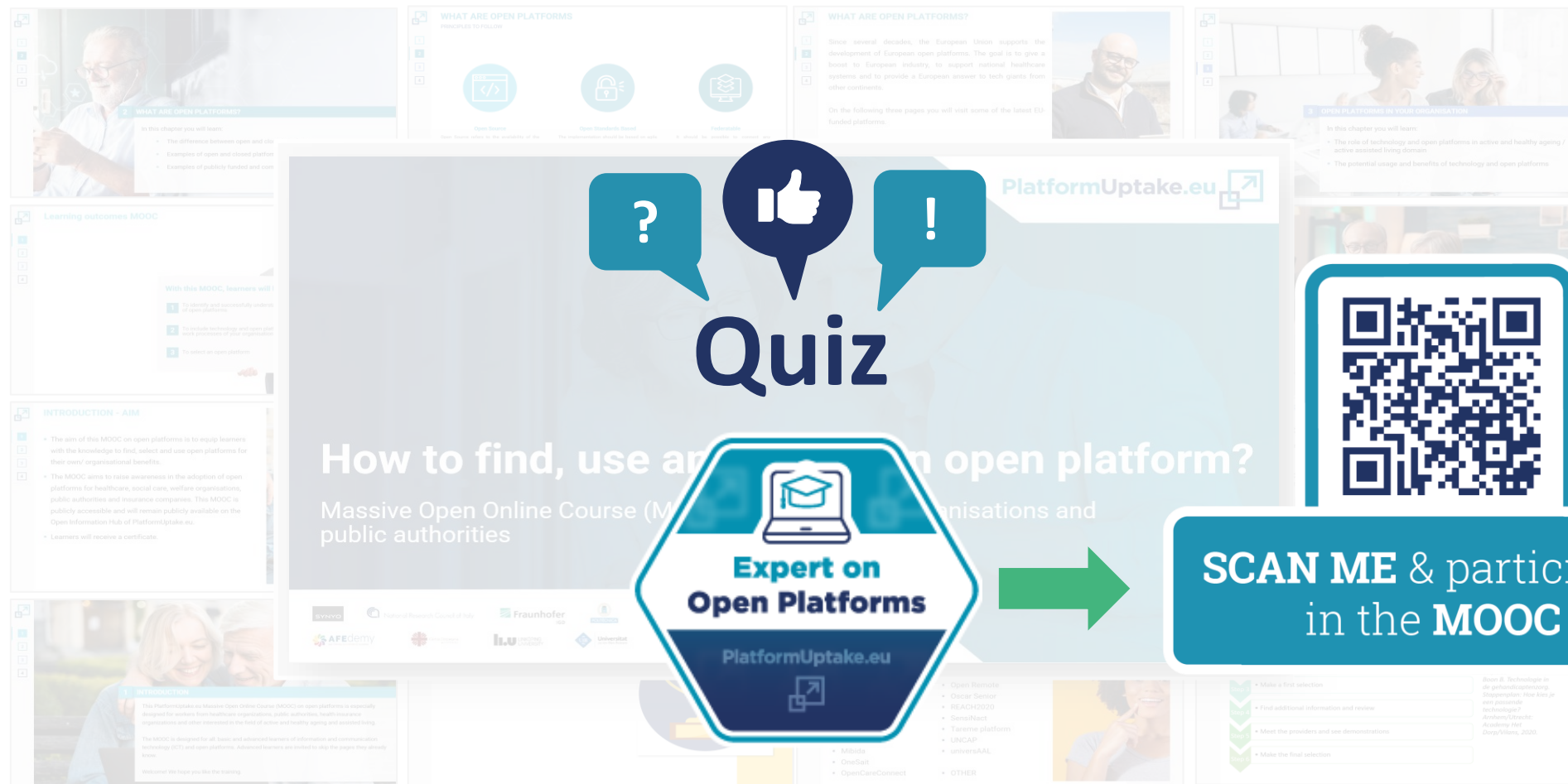
Supported technologies:

- AIGTES
- 2PCS
- ASCOM
- EkoSmart
- FIWARE
- KJ Messenger
- Mibada
- OneSait
- OpenCareConnect
- Open Remote
- Oscar Senior
- REACH2020
- SensiNact
- Tareme platform
- UNCAP
- universAAL
- OTHER



! Helps learners identify, select and integrate open platforms in processes and organisations

! For care professionals, public authorities, health insurance organisations



**Quiz**

**How to find, use and integrate an open platform?**

Massive Open Online Course (MOOC) for organisations and public authorities

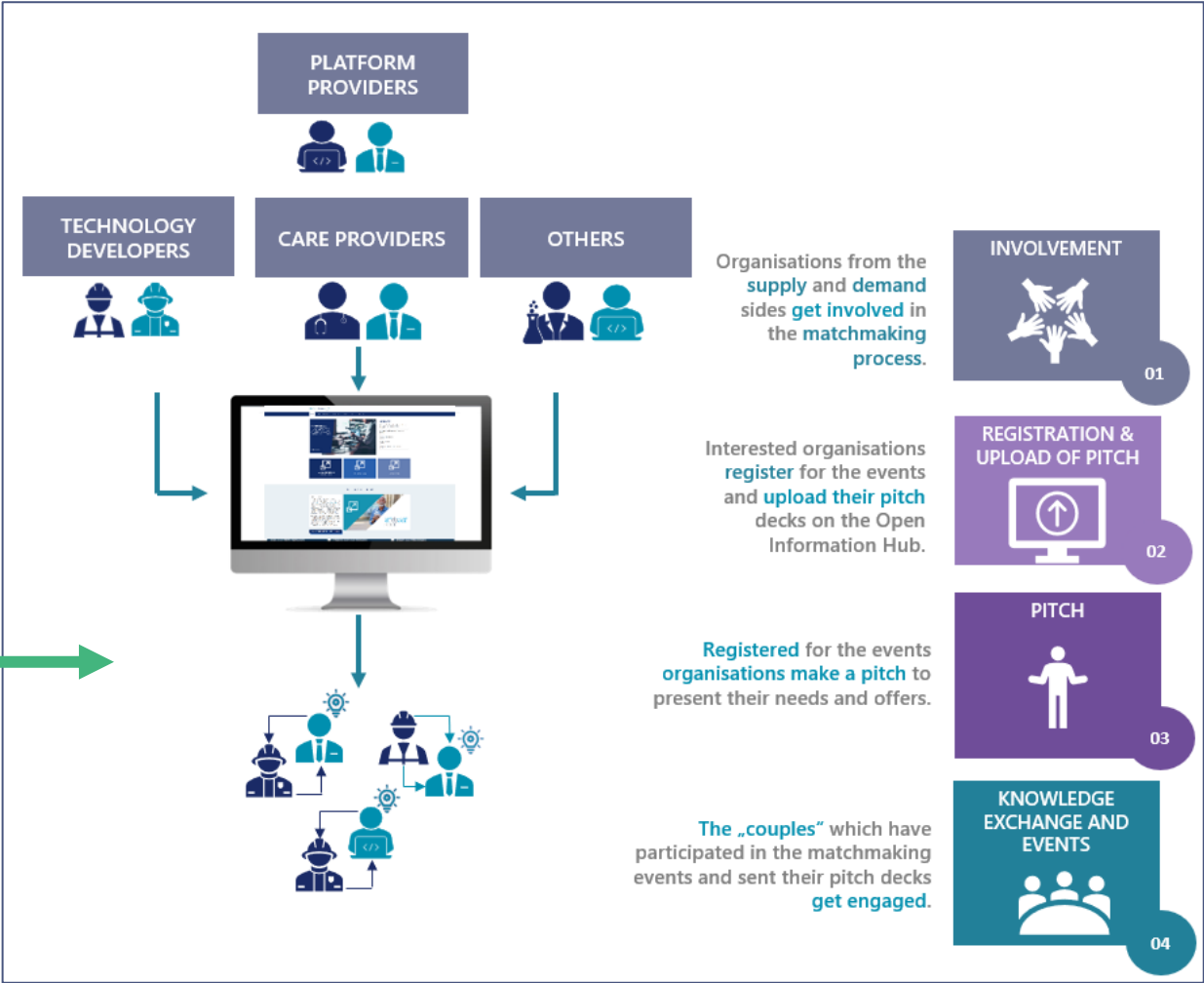
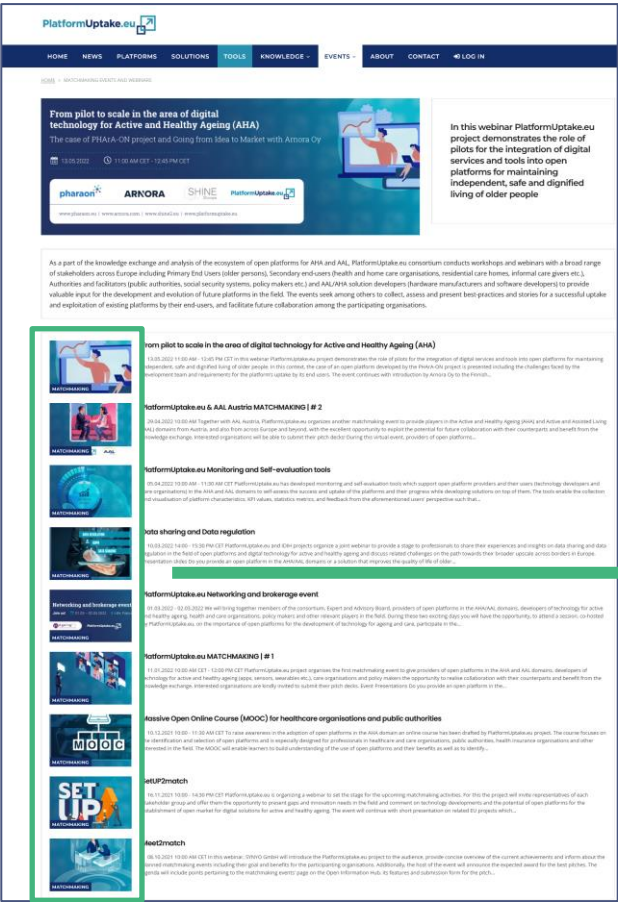
**Expert on Open Platforms**

PlatformUptake.eu

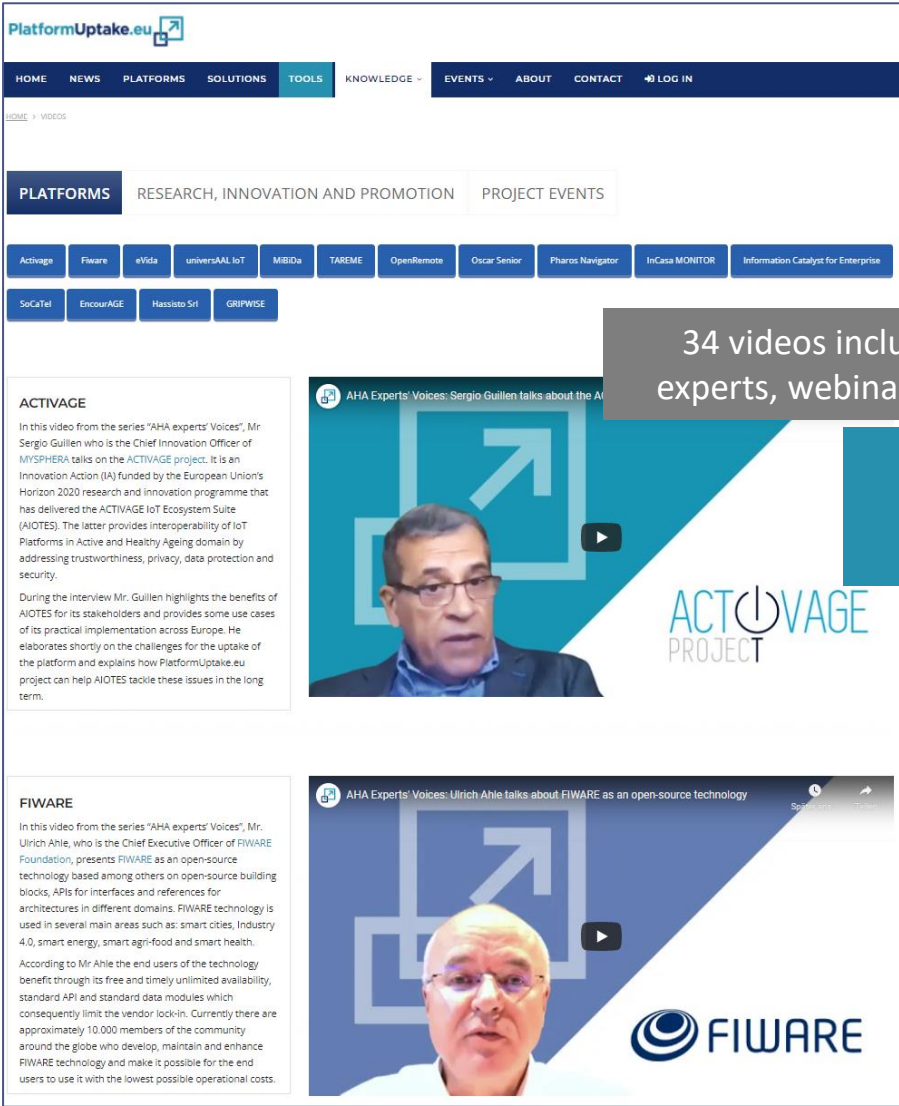
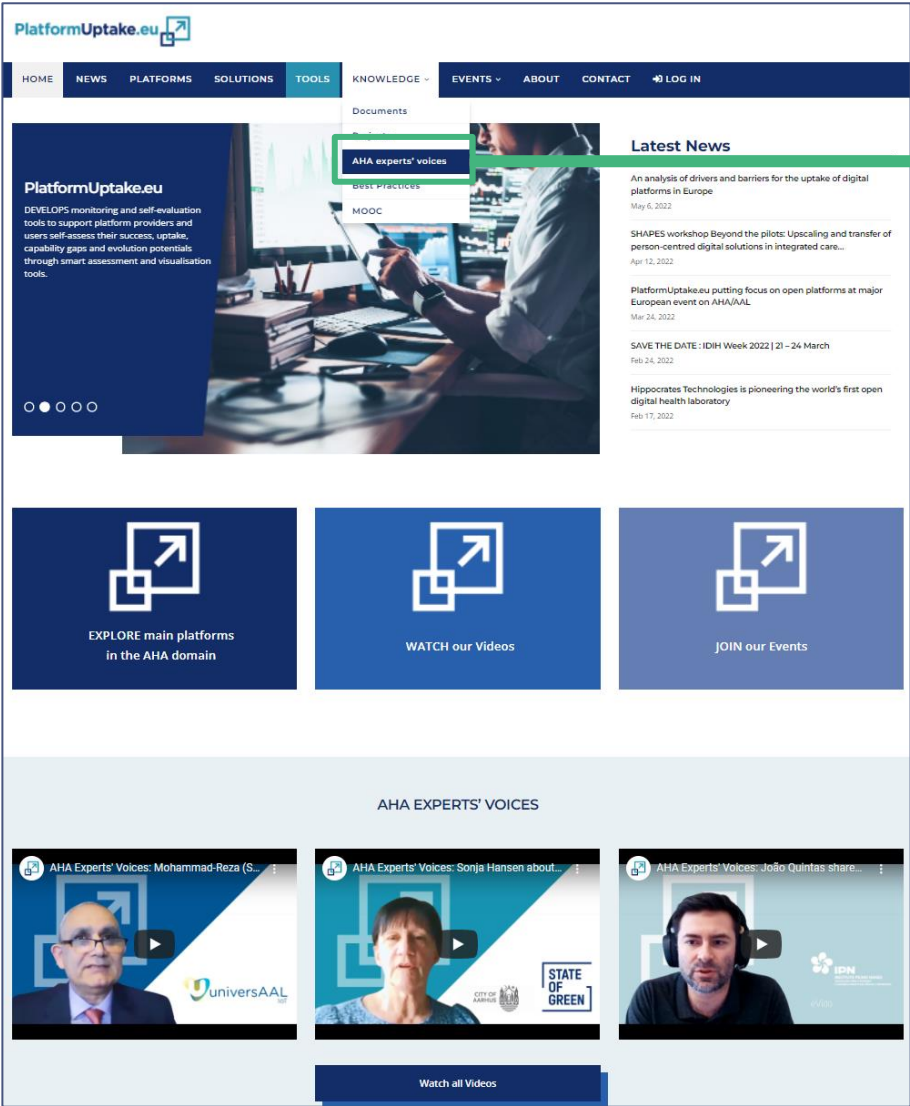
**SCAN ME & participate in the MOOC**

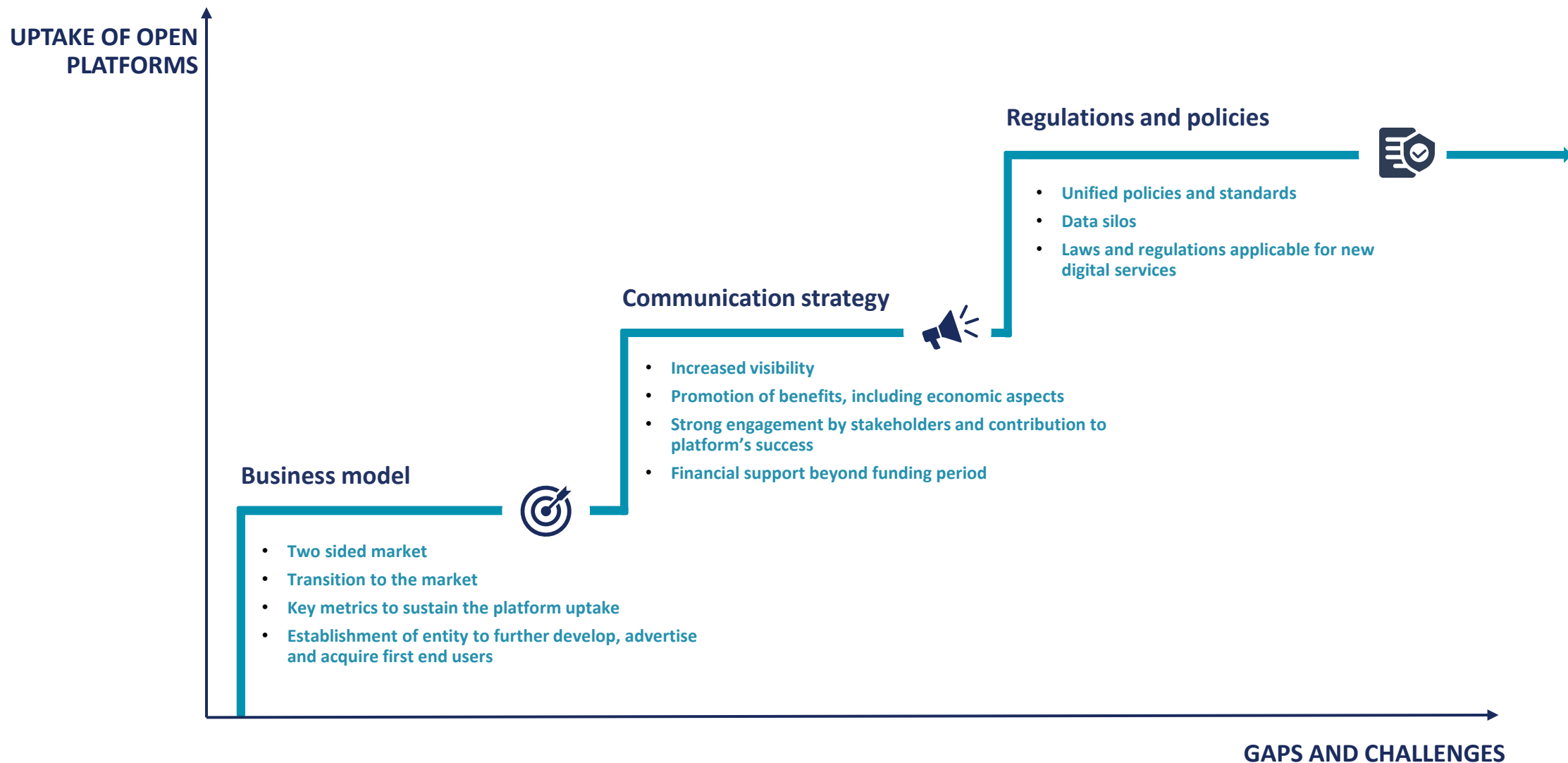
! Helps learners identify, select open platforms and integrate them in processes and organisations

! For care professionals, public authorities, health insurance organisations













# From pilot to scale in the area of digital technology for Active and Healthy Ageing (AHA)

The case of PHArA-ON project and Going from Idea to Market with Arnora Oy



13.05.2022



11:00 AM CET - 12:45 PM CET



**ARNORA**



PlatformUptake.eu 

[www.pharaon.eu](http://www.pharaon.eu) | [www.arnora.com](http://www.arnora.com) | [www.shine2.eu](http://www.shine2.eu) | [www.platformuptake.eu](http://www.platformuptake.eu)



National Research Council of Italy



**Fraunhofer**  
IGD



POLITECNICA



Institut  
"Jožef Stefan"  
Ljubljana, Slovenija



Cáritas Diocesana  
de COIMBRA



LINKÖPING  
UNIVERSITY



Universitat  
de les Illes Balears



SMARTHOMES



This project has received funding from the European Union's Horizon 2020 Research and Innovation Action under Grant Agreement No 875452.

# PHArA-ON – a case of Open Platform in AHA domain, main challenges, and end-users Organisations requirements

## Introduction to the Pharaon Project

### SANTA CASA DA MISERICÓRDIA DA AMADORA

MARIANA CAMACHO

Social Innovation Consultant

From pilot to scale in the area of digital technology for Active and Healthy Ageing (AHA)

13/05/2022



*Phara-ON project aims to achieve a smart and active living for Europe's ageing population*

- Maintain the **dignity of older adults** and **enhance** their **independence, safety** and **capabilities**
- **Personalised** and **optimised health care delivery**
- **Open platforms** that can be readily deployed
- **Digital services, devices** and **tools** integrated in open platforms
- Application of **IoT, artificial intelligence, robotics, cloud computing, smart wearables, big data and intelligent analytics** in tools and services

Built upon  
mature existing  
state-of-the-art  
open platforms  
and  
technologies/to  
ols

Interoperable  
cross-domain  
Pharaon  
ecosystem and  
standardized  
platforms;

Data privacy,  
cybersecurity,  
interoperability  
and openness  
by design

“Open calls”:  
single  
solutions,  
small-scale  
pilots

User-centric  
and MAFEIP-  
like approach  
for  
acceptability  
and impact  
assessment





**IDENTIFY**



**IMPLEMENT**



**DEMONSTRATE**



**ENSURE**



**VALIDATE**



**INVOLVE**



## IDENTIFY

IDENTIFY the current state of interoperability between widely used platforms and partner solutions and solutions from third parties involved.



## IMPLEMENT

IMPLEMENT personalised analytics that provide older adults and their caregivers with the most pertinent physical and mental health as well as wellbeing information.



## DEMONSTRATE

DEMONSTRATE the feasibility of integrating the Pharaon platforms with existing systems related to intelligent transport and mobility, energy optimisation, and smart cities.



## ENSURE

ENSURE user-friendly human-computer interaction modes that address various capacity limitations and provide rapid access to useable information.



## VALIDATE

VALIDATE the Pharaon platforms at an early stage providing feedback to the function and usefulness of these platforms and their integrated technologies.

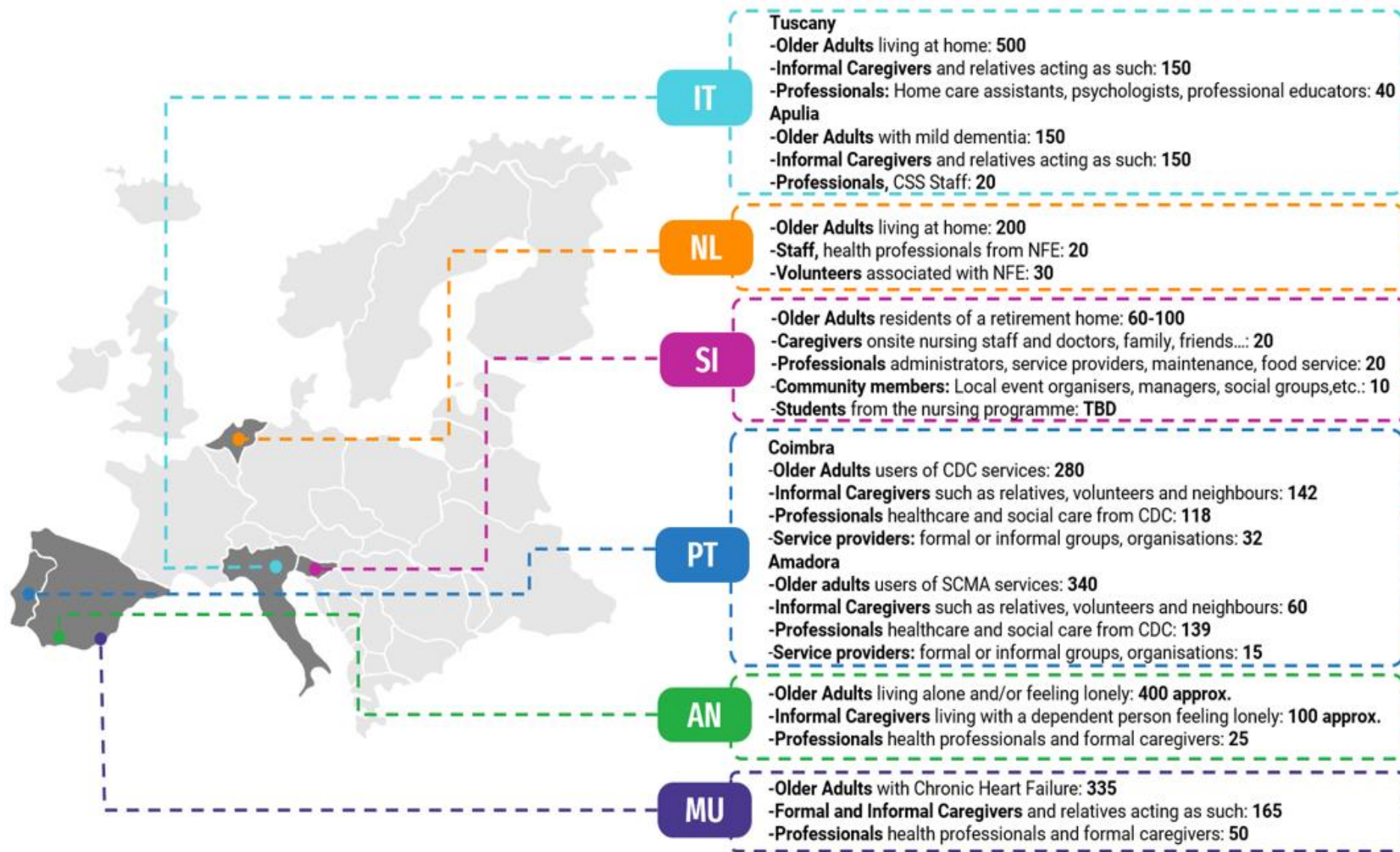


## INVOLVE

INVOLVE new stakeholders and their technologies, products, or services in the different ecosystems through the launch of open calls.

**3'400 users** including  
older adults,  
professionals,  
volunteers, informal  
caregivers  
over **6 pilot sites**  
in **5 EU countries**:

- Murcia (Spain)
- Andalusia (Spain)
- Portugal
- The Netherlands
- Slovenia
- Italy



## PHARAON CHALLENGES (PCHs)

**PCH1** - The behavior and the approach of elderly to friendly technological devices

**PCH2** - Health status definition and its progress over time

**PCH3** - Non-Intrusive Monitoring and Alarm Triggering

**PCH4** - Promote social cohesion

**PCH5** - Define specific personalized care plan on the basis of user's needs

**PCH6** - Reduce isolation and loneliness, enhancing the autonomy through connectivity and digital tools

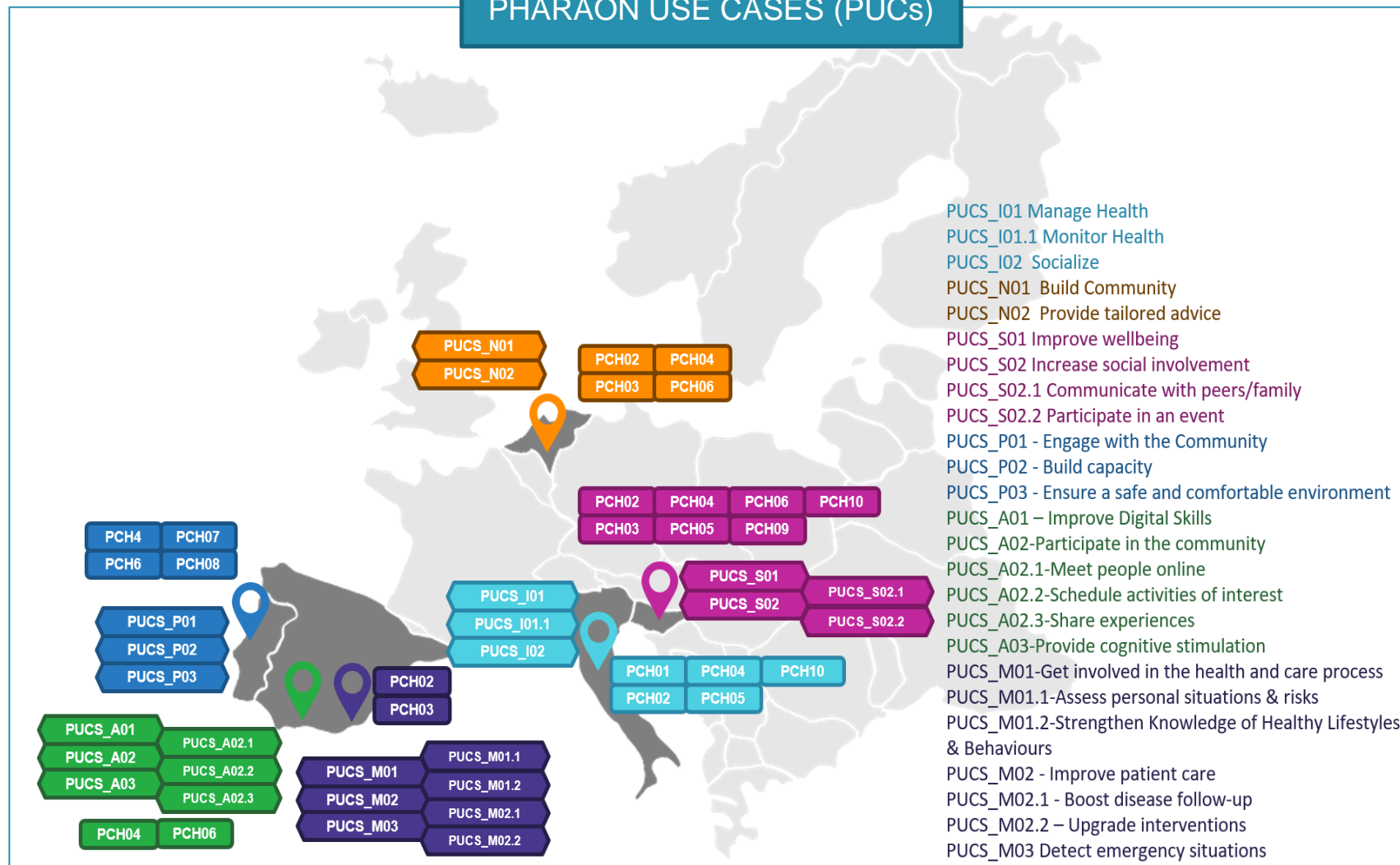
**PCH7** - Promote accessibility and the provision of proximity services through the use of IT platforms

**PCH8** - Promote capacity building and awareness on green economy, citizenship and cultural traditions

**PCH9** - Indoor Environmental Quality

**PCH10** - Support to caregivers towards more efficient and personalized care services

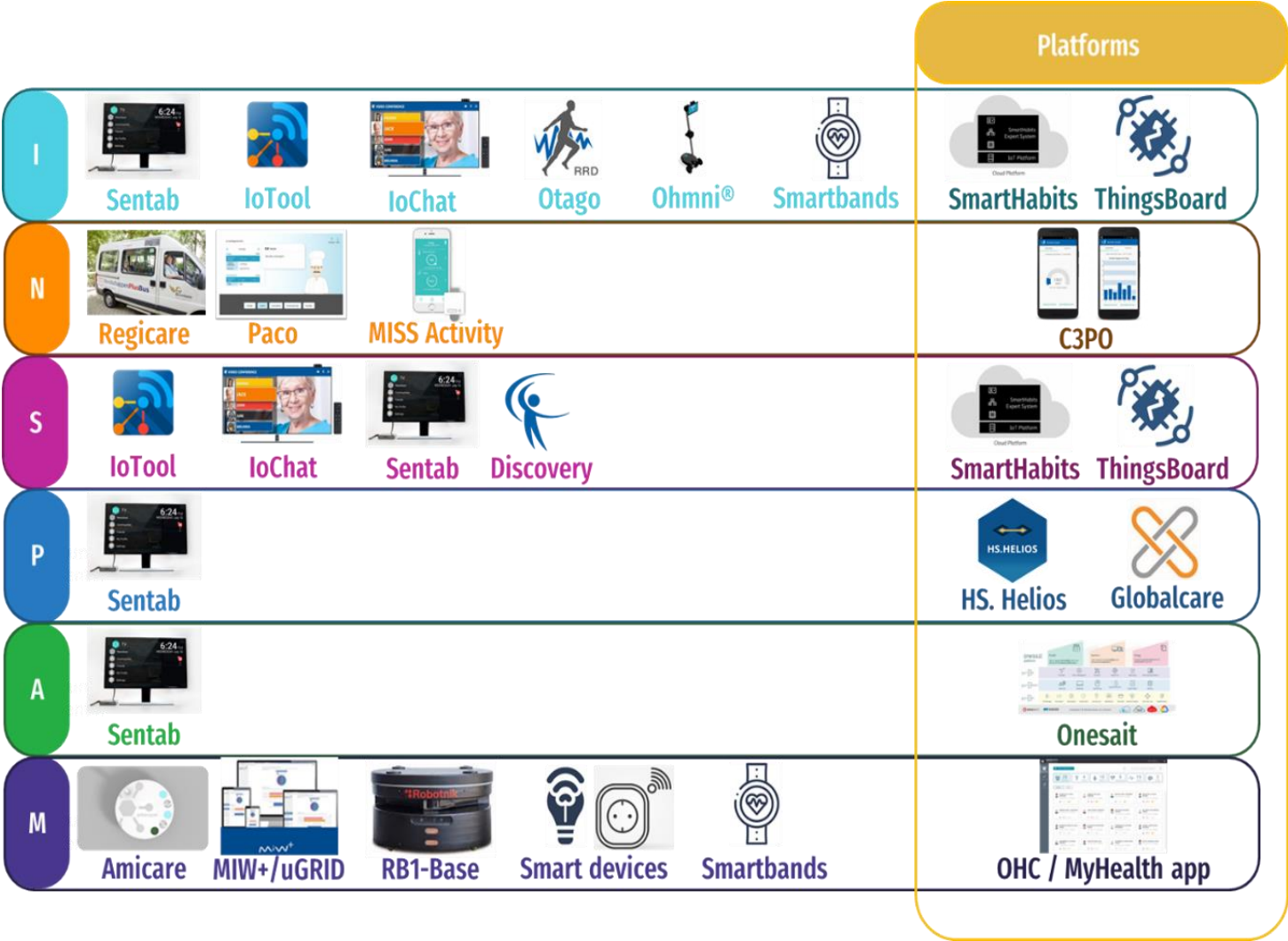
## PHARAON USE CASES (PUCs)



**Co-Creation Agile Methodology:**  
All the stakeholders are involved in designing products and services

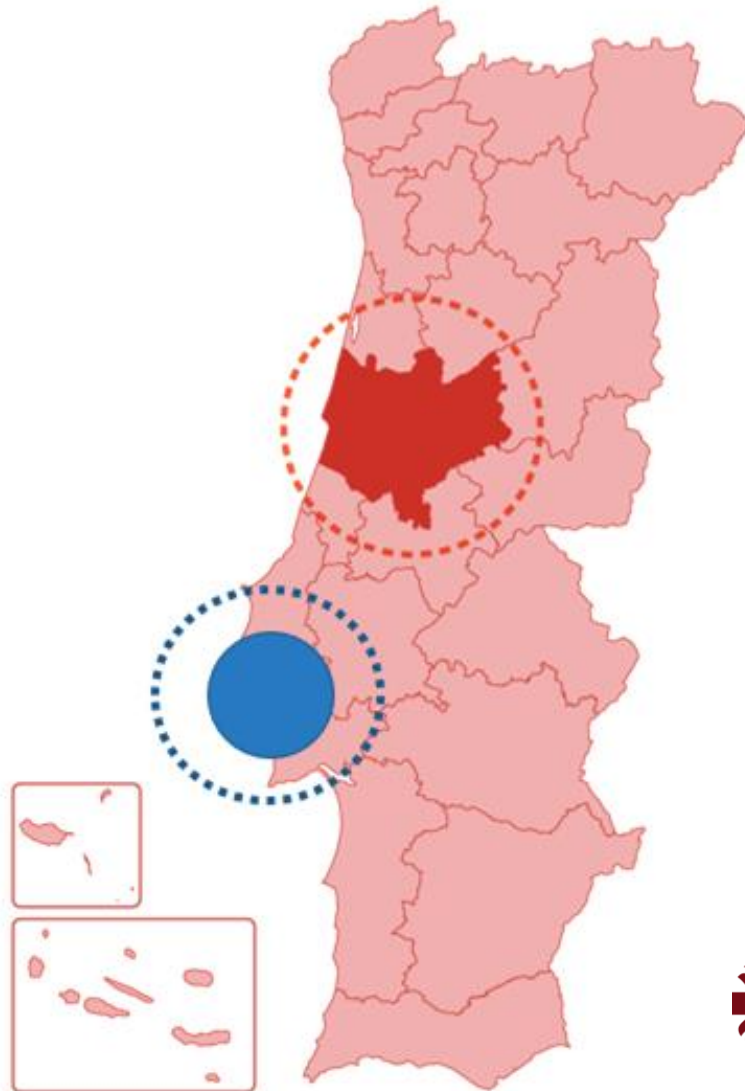
**Two-stages validation:**  
Pre-validation and large-scale pilots

**Two open calls to involve new stakeholders and their tech and services (M23, M33)**





# PHArA-ON - Portuguese Pilot



The pilot in Portugal is divided between two locations, [Amadora](#) and [Coimbra](#). The objectives of the Portuguese pilot sites are [to develop and implement citizen-focused solutions, integrated care and planning, integrated infrastructures and processes, and knowledge sharing.](#)

These pilots include a central focus on the relationship between the [community](#), the [environment](#), and the [people living](#) in them.





Santa Casa da Misericórdia da Amadora



Cáritas Diocesana de Coimbra

IDENTIFIED CHALLENGES RELATED TO THE PROCESS OF AGEING IN URBAN ENVIRONMENTS	
PCH 4	<b>Lack of social cohesion</b> within the community and among its different actors
PCH 6	<b>Increased isolation and loneliness</b> , compromising older adults' autonomy, connectivity and social participation
PCH 7	<b>Lack of older peoples' access to proximity services</b> , through the use of IT platforms
PCH 8	<b>Reduced capacity and awareness on environmental issues</b> , citizenship and cultural traditions

## PILOT CHALLENGES AND HYPOTHESES

	Challenge addressed	Implementation	Hypotheses
PHC4	Promote Social Cohesion	Participating in Community Life  Lifelong learning  Ensuring a safe and comfortable environment	To <b>enhance</b> the <b>use</b> of <b>city environments</b> by the older adults, the Portuguese pilot aims at putting Health and Care on the heart of the cities, thus addressing some of the main determinants of <b>health improvement</b> . In this sense, by connecting “ <b>SMART CITIES and these AGEING CHALLENGES</b> ”, it intends to favor the creation of a support ecosystem of Health and Care actors around the frailest ones, across public, private, voluntary and community sector organizations.
PCH6	Reduce isolation and loneliness, enhancing the autonomy through connectivity and digital tools		
PCH7	Promote accessibility and the provision of proximity services through the use of IT platforms (Integrated care and planning)		
PCH8	Promote capacity building and awareness on green economy, citizenship and cultural traditions		

## PHArA-ON - Goals of the Pilot's scenario

- ⌚ Integrated approach in health and social care at home
- ⌚ Person-centred care through ambient assisted living;
- ⌚ Active and healthy ageing, improving healthy life expectancy and prolonging independent living;
- ⌚ Preserve or improve person functional capacity;
- ⌚ Tackle loneliness and isolation by improving mobility, accessibility, connectivity and social participation;
- ⌚ Compassionate cities;
- ⌚ Equity, wellbeing, social cohesion, multi sector collaboration and action;
- ⌚ Caregivers empowerment through tools and knowledge;
- ⌚ Foster preventive medicine through identification of lifestyles and health screenings;
- ⌚ Improve efficient health and care resources in the cities;
- ⌚ Community ecosystems that are smart, sustainable, healthy and responsive to ageing citizens needs;
- ⌚ Sustainable solutions of social networks with environmental concerns.



# PHArA-ON - Impact assurance

To involve relevant actors in the co-design of objective and strategy for the service introduction into the daily practice and market uptake after the project's end

To share best practice both inside and outside the consortium in order to address all the key points that are necessary in the pathway towards the market

Communicate evidence based value proposition to decision makers

Definition of replicability and scalability roadmap according to local ecosystem

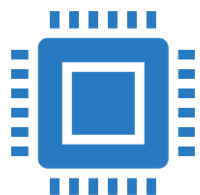


# PHArA-ON - Impact assurance goals

KEY PERFORMANCE FRAMEWORK



Local KPIs			
Evaluated through: questionnaires, focus group and interviews; Baseline, intermediate, final (timing)			
Quality of Life	Users Acceptance	Cost-effectiveness	Innovation
Perceived quality of life	Satisfaction	Potential cost-effectiveness due to enhanced self-care, lifestyle, age-friendly, environments and socioeconomic benefits	Number of jobs created
Perceived loneliness	Easyness to use		Timing for training end-user
	Utility		Timing for training carers
	Perceived safeness		Technology adoption
	Drop out rate		



## Platforms & Pilots (PP)

- Increased prospects for future digital industrial platforms by **validation of technological choices**, sustainability and reproducibility, of architecture models, standards, and interoperability, as well as of verification of non-functional characteristics such as security and privacy.
- Strengthened links with other, **bottom-up programmed and initiatives, supported by regional, national and European policies and funds**.
- **Increased number of services and applications** operated by European companies, especially small businesses and entrepreneurs.
- Significant and measurable **contribution to standard or pre-normative activities**.
- **Increased number of platforms, applications, business processes** and innovative business models validated via large-scale-piloting.
- Emergence of **sustainable Ecosystems** around digital platforms.

## Smart and Healthy Living at home (SHLH)



- Emergence of EU-Led **platform for smart and healthy and independent living at home**.
- Increased competitiveness of the European ICT industry in the domain through enhanced **interoperability, best practices, for viable business and financing models and scalable markets**.
- Demonstrate **links and build synergies** with Member States and regional initiatives in this area
- **Improved and Evidence-Based efficiency** of health and care systems with demonstrated added value of underlying technologies.
- Improved **quality of life and health status** for involved users and carers, with demonstrated added value of underlying technologies.
- User accepted, validated innovative solutions addressing **accessibility, privacy, security, vulnerability, liability and trust-connected data** spaces.



# Questions & Answers



# ARNORA

**Facilitating Innovation - Facilitating Testing**

Jukka Niiranen: +358(0)40 502 8201,  
[jukka.niiranen@arnora.com](mailto:jukka.niiranen@arnora.com)

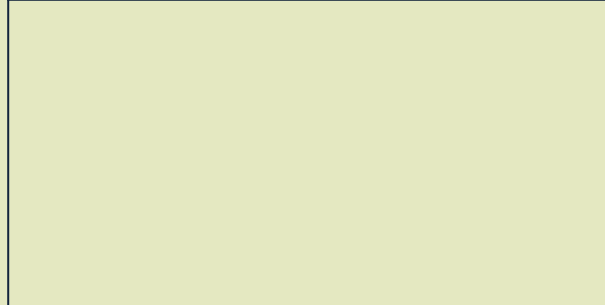
# ARNORA

## Facilitating Innovation

You bring in the innovation, we facilitate your operations from productisation to segmentation and from contacts to go-to-market. Arnora and our network can find and offer preseed financing and an array of widely approved services that guide our customer companies forwards on their path to growth and international success.

## Nurturing HealthTech

Bringing together companies and suitable health sector testbeds and living labs. Arnora is the catalyst and interpreter who speaks both Business and Doctor-languages. We thrive on tackling with the pricing issues and finding required financing.



## Business Development

Business and project plans as well as the development of business models, processes, sales and marketing form the very essence of our doing. Arnora has specialized in challenging business cases and public development projects especially in the field of high tech and ICT.

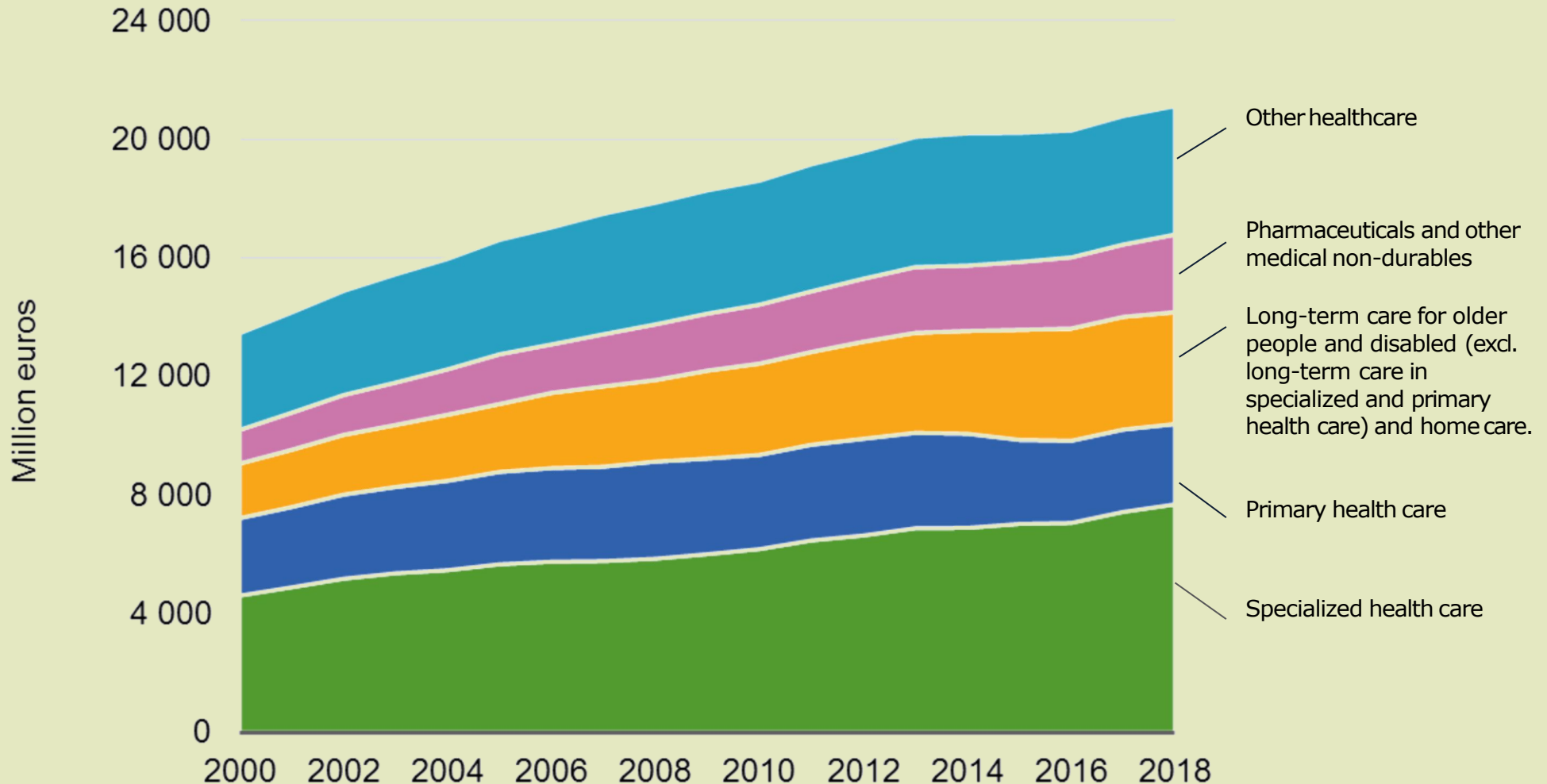
## Innovation Village

Working space for innovative Health Tech, Med Tech and ICT startups. Arnora's deep involvement and our inspirational and international work community offers exceptional brain-picking opportunities as well as possibilities for social and recreational endeavours.

## Health expenditure in 2000-2018



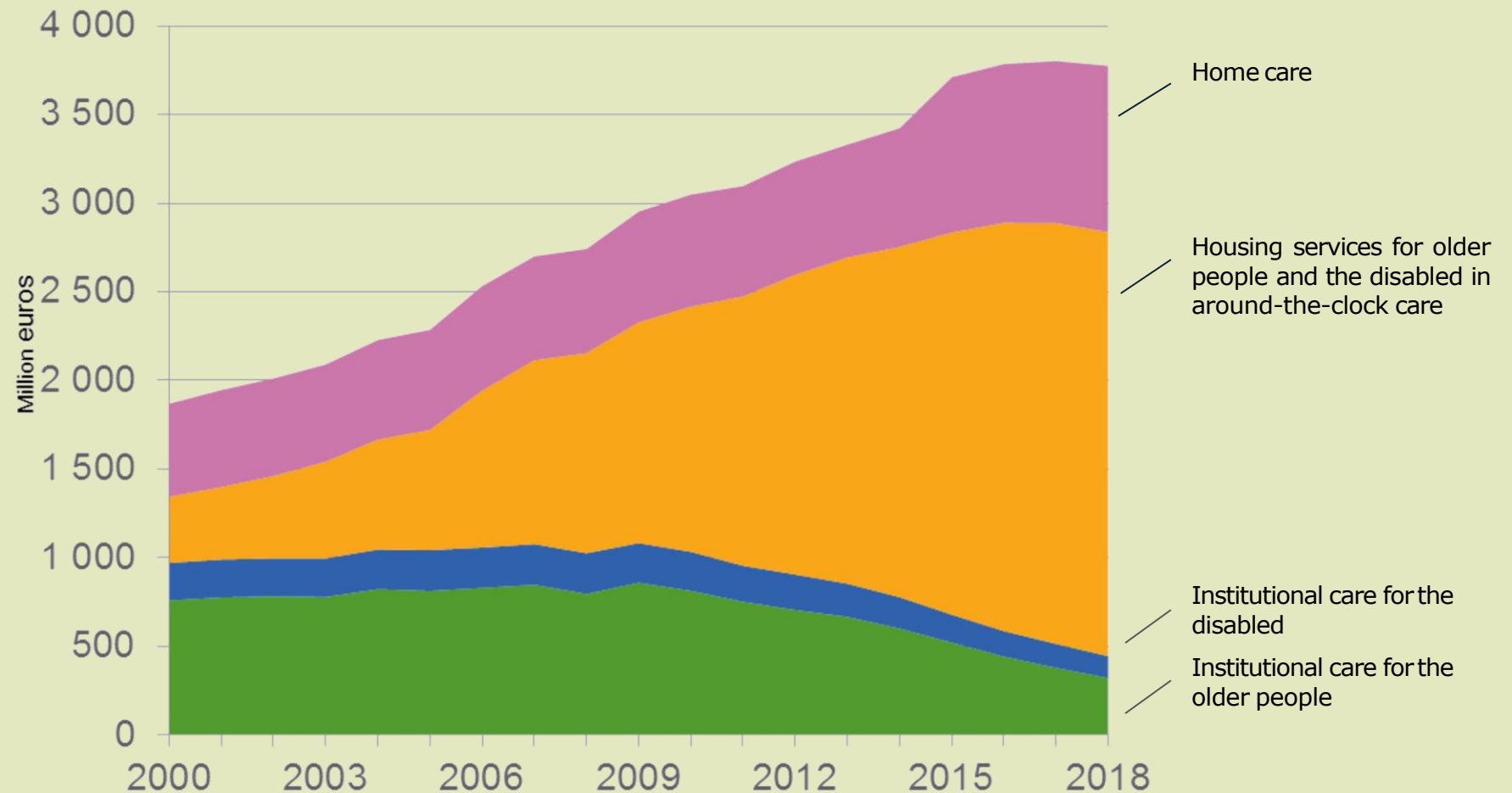
Source: THL,  
Health Expenditure  
and Financing in  
2018.  
( 2018 prices )



## Long-term care for older people and disabled and home care in 2000-

2018  
thl

Source: THL,  
Health Expenditure  
and Financing in  
2018.  
( 2018 prices )



## There are interesting actors in the markets

**Healthtech Finland** is an industry association and part of Technology Industries of Finland.

**Upgraded** is a non-profit association for health & wellbeing startups and innovations in Finland

**Arnora** facilitates innovations and brings together companies and suitable health sector testbeds.

**TestBeds in Finland** are e.g. OuluHealth Labs, Lab-ELSA, HealthHUB Tampere, Kuopio Living Lab, HUS TestBed

**Business Finland, European Healthtech Investment Forum, CleverHealth Network, Slush...**

Other public **ecosystems** that support and connect testing, such as **Terkko, Forum Virium** and **Helsinki Business Hub**

..however public organisations are challenging purchasers. They lack motive to buy from SMEs.

### Sources:

<https://healthtech.teknologiateollisuus.fi> <https://www.upgraded.fi/>

<https://kauppapolitiikka.fi/terveysteknologia-luohyvinvointia/> <https://www.cleverhealth.fi/>



## Facilitating Innovation → Testing → Sales

**HighTech** entrepreneurs originating from outside EU needed to build business plan and application for eligibility statement for migration.  
> Sparring, writing and guidance.

HealthTech **growth company** was seeking for EU Horizon funding.  
> Project planning, definitions and matchmaking.

**Start-up** company needed to start real-life testing in public Home Care. > Definition of what needs to be tested and negotiations.

**Start-up** company wanted to start testing in Nursing Home environment. > Solution definition and matchmaking.

HoReCa area customer was looking a way to build a new **ICT solution** to support their operations and diversify their business. > Planning, project and productization.

**Public organization** customer was looking for partners in numerous Baltic Sea Region countries for a project application.  
> Partner collection, visits, project definition and writing.

Strategy definition and communication

Customers, segments and focus

Company and project level financial planning and projections

Market studies and market-fit

**Making solutions sellable and purchasable**

## Coming soon: One-Stop-Funnel

- Arnora together with Aarhus Municipality from Denmark and Västerbotten Region from Sweden are soon launching a new One-Stop-Funnel project.
- Project focuses on the development of “the funnel” that collects and refines HealthTech companies for actual product and solution testing at the TestBeds and LivingLabs especially in the Nordics.
- Three year project is financed by NordicInnovation.
- We are also always interested in participating to Horizon, Eureka / Eurostar projects. Either as a service vendor or partner.



# HOIVITA

Remote Health Monitoring

HOIVITA

HOIVITA

*henkaus + vesratio*

# SOLUTION

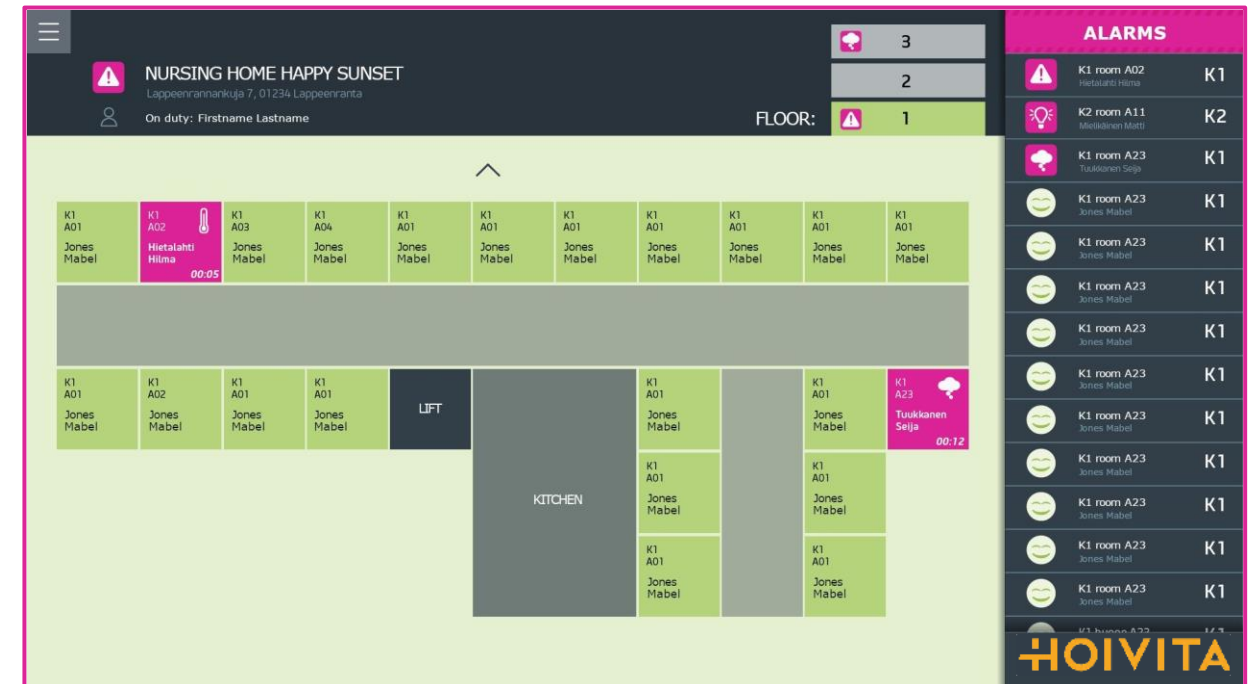
HOIVITA

Hoivita is all about presenting the right information at the right time

**Completely contactless solution** measuring patient's movement, breathing and environment.

**Minimalistic UI** provides quick grasp of patient's health enabling public and private healthcare operators to take better care of their patients

*“ Reduced emergency department visits, hospitalizations, and 30-day readmissions for homebound patients, saving an average of **\$2,700** per beneficiary per year and increasing patient and caregiver satisfaction “*  
- Harvard Business Review





# REGULATIONS

## Common Knowledge

- CE Class I Class IIA Class III
- MDD →MDR
- Technical Documents, EMC Tests, (Clinical Trials)
- Notified Bodies (NB)
- Timeframes
- Cost

## How, Why

- One of Finland's largest private healthcare provider

## Lessons

- Do you really really need a medical device certification?
- Intended use
- Know your NB's - get them involved really early
- Change implementation, colours
- Pre-EMC Tests
- VC Financing

## 1st Pilot

- One of Finland's other largest private healthcare provider

## Domestic

- Silamuskot

## International

- Skåne Municipality
- D' Olot Hospital

## Arnora

- Local EMC testlabs
- Connections with testbed facilities

Pivoting



Vesratio

# HOIVITA

Valtakatu 42 H 15  
53100 Lappeenranta  
Finland

[www.hoivita.com](http://www.hoivita.com)  
[abhishek.jayaprakash@hoivita.com](mailto:abhishek.jayaprakash@hoivita.com)

Business ID: 3266919-8



**The go-to company in remote health monitoring**

# Challenges in Subcontracting and Building Multinational Distribution Channels

Antti Pellinen

Confienta Oy

# Confienta Oy

- Over ten years of experience in elderly safety bracelet and wrist phone services.
- Serves both private and public health care providers, as well as consumer customers.
- Distribution increasingly via channels.
- Experience with subcontracting from various regions.





# Challenges in Multinational Subcontracting

## Development work

- Specifications
- Common language, common understanding
- Time zones
- Project management
- Acceptance
- Different environments?
- Testing, testing and testing!
- Payment terms

## Production

- Specifications
- Common language, common understanding
- Delivery times – component shortage!
- Logistics
- Quality assurance
- Payment terms
- Warranty – or swap stock?

# Challenges in Building Multinational Distribution Channels

## Services

- Target segments - coverage
- Exclusivity vs. minimum sales targets
- Reseller or agent
- Pricing principles
- National regulations – who complies
- Support!

## Tangible products

- Target segments - coverage
- Exclusivity vs. minimum sales targets
- Reseller or agent
- Pricing principles
- Ordering process and stock
- Payment terms – advance payment
- Logistics - incoterms
- National regulations – who complies
- Installation responsibilities
- Spare parts – inventory responsibility
- Warranty and support!

**ARNORA**

**HOIVITA**



**Q & A**

# ARNORA

**Thank You!**

Jukka Niiranen: +35840 502 8201, [jukka.niiranen@arnora.com](mailto:jukka.niiranen@arnora.com)

Abhishek Jayaprakash: +35841 751 1769, [abhishek.jayaprakash@henkaus.com](mailto:abhishek.jayaprakash@henkaus.com)

Antti Pellinen: +35840 547 7044, [antti.pellinen@tikura.com](mailto:antti.pellinen@tikura.com)



## Questions & Answers





Thank you for your participation!

Contact us, get involved, stay updated:



office@platformuptake.eu



www.platformuptake.eu



@PlatformUptake

